REMARKS

In response to the Official Action of April 5, 2004, claims 2, 6, 8 and 11 have been amended so as to include all of the limitations of the base claim in any intervening claims. As such, in view of the Examiner's statement that claims 2-4, 6, 8 and 11 were objected to as being dependent from a rejected base claim, these claims are all now believed to be in condition for allowance. Furthermore, with regard to claim 2, the objection concerning the phrase "a response" at line 10 thereof has been amended as suggested by the Examiner.

Referring now to the claim rejections, it is respectfully submitted that claims 1, 5 and 7 are not obvious under 35 U.S.C. 103(a) in view of US patent 6,185,612, Jensen et al. (hereinafter Jensen) in view of applicant's admitted prior art (AAPA). The Examiner primarily relies upon Jensen in his assertion that it shows the steps of claim 1 except for the "...the first network element located on a first hierarchical level...the second network element located on a second hierarchical level, which second hierarchical level is above the first hierarchical level in the xDSL network but which second network element is other than the network managing station...". However, it is respectfully submitted that claim 1 is particularly directed to a method of distributing configuration information in an xDSL network which comprises network elements on certain hierarchical levels and a network managing station. Jensen is directed to a method for topology information management of a network. The topology information management uses a topology information manager which maintains fragments of network topology and provides access to either entire fragments or to fragment summaries in response to authenticated requests. This topology information in turn is used by an authenticated path selector received from the manager so as to select message routes. There is therefore no suggestion in Jensen of the distribution of configuration information as disclosed and claimed in claim 1. It is noted that the specification defines configuration information as a general term that means all such information that an active network element in an xDSL network needs for properly fulfilling its functional tasks in the network. Such configuration information as noted at page 2, lines 24-36 of the specification would include how the local network of the users couple to the outside world and what kind of limitations are applicable to communications

through the xDSL connection. It is also mentioned at page 2, lines 24-36 that lowest-level xDSL switches need to know which subscribers are connected and what is the level of service and data transmission rates that should be provided to each subscriber while higher-level xDSL switches need to know with which lower-level elements they are communicating with and what are the characteristics of each of these connections. Such configuration information does not necessarily imply topology information for purposes of determining message routes. As such, it is respectfully submitted that Jensen is directed to a different type of method for use in general networks and is not directed to an xDSL network and the distribution of configuration information in such an xDSL network.

Furthermore, the recited passages in Jensen, such as column 9, lines 34-36, do not in any way suggest configuration information unless topology information is considered to be configuration information. Even assuming that topology information could be considered configuration information, Jensen does not support the fact that the network being discussed therein is a hierarchical network nor a hierarchical network of an xDSL type. The fact that Jensen authenticates requests when a request is made for such topology information does not establish a hierarchical nature of the network but merely reinforces the fact that the topology manager disclosed in Jensen uses a topology information manager for dispensing information concerning the topology to other members of the network. It is clear therefore that the dispensing of such topology information from the topology information manager does not suggest the recitations in claim 1, that a second network element when it determines that it is appropriate to read configuration information requested, reads such information and transmits that information to a first network element, wherein the second network element is other than the network managing station. There is simply no equivalent in Jensen of a second network element which is other than the network managing station (assuming one can argue that the topology information manager is analogous to the configuration information) wherein such a second network element is able to read configuration information requested in the request for configuration information from a configuration memory of that second network element and to distribute it if appropriate to a requesting first network element. The fact that the AAPA discloses a hierarchical network such as shown in Figure 1 of the present application, does not make up for the deficiencies in Jensen.

The Examiner argues that one of ordinary skill in the art would be motivated to combine Jensen with the AAPA on the basis that topology information can reveal the shortest path or a path that has no failures in it. However, that motivation concerning the desire for topology information does not give any hint for the desire for configuration information in general for use in an xDSL network nor why the configuration information as shown in an xDSL network in Figure 1 of the present application would look to Jensen concerning a method of distributing topology information and conclude that it would be desirable to use a topology information method as disclosed in Jensen for purposes of transferring configuration information in an xDSL network.

As is well-established in the law, without the motivation to combine references, it is impermissible to do so. Specifically, MPEP Section 706.02(j) sets forth the text that an Examiner must follow to combine references. There, a three-pronged test is set out to establish a *prima facie* case of obviousness. As there stated:

> First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP Section 2143 - Section 2143.03 for decisions pertinent to each of these criteria.
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> The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). See MPEP Section 2144 - Section 2144.09 for examples of reasoning supporting obviousness rejections.

In the case of *In Re Sang Su-Lee*, 277 F.3d 1338, 1345-46, 61 USPQ2d 1430, 1435 (Fed. Cir. 2002), the CAFC reiterated that "a showing of a suggestion, teaching, or motivation to combine the prior art references is an essential component of an obviousness

holding." The mere fact that references can be combined does not render the resultant combination obvious unless there is a "suggestion or motivation ***in the reference***" to combine. *In re Mills*, 916 F.2d 680, 682; 16 USPQ2d 1430, 1432 (Fed. Cir. 1990) *cited at* MPEP § 2143.01 (emphasis added).

Of course, "an express written motivation to combine" need not appear in prior art references. *Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1276; 69 USPQ2d 1686, 1690 (Fed. Cir. 2004). However, merely finding motivation to combine prior art references in the nature of the problem to be solved, instead of finding that motivation in the express or implied statements of the prior art, is "particularly relevant with simpler mechanical technologies." *Id.* Moreover, the motivation shown by the examiner must have existed "before the invention itself, to make the new combination." *Id.*

"The factual inquiry whether to combine references must be thorough and searching." *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001). This factual inquiry "cannot be dispensed with." *In re Lee*, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002). Also see, e.g., *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed. Cir. 2000) ("a showing of a suggestion, teaching, or motivation to combine the prior art references is an `essential component of an obviousness holding'") (quoting *C.R.Bard, Inc., v. M3 Systems, Inc.*, 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998)); *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617(Fed. Cir. 1999) ("Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references."); *In re Dance*, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998) (there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant); *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988) ("`teachings of references can be combined only if there is some suggestion or incentive to do so.'") (emphasis in original) (quoting *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984)).

As a result of the foregoing, it is respectfully submitted that the motivation for combining Jensen with the AAPA is lacking and, even if Jensen is combined with the AAPA, there is no teaching in either the AAPA or Jensen of a second network element other than the network managing station in an xDSL network which, when it is appropriate to read configuration information requested, reads such configuration information from a configuration memory of the second network element, and transmits such configuration information that has been read from the configuration memory of the second network element to the first network element. As such, it is respectfully submitted that claim 1 is not obvious in view of Jensen in view of the AAPA.

Similarly, claim 5 is believed to be distinguished over Jensen in view of the AAPA since it depends from claim 1 and adds further limitations concerning a manner in which a pre-defined rule at the second network element is used to decide whether to forward the request from the second network element to a third network element located on a third hierarchical level.

With regard to claim 7, this method is also like claim 1 in that it is directed to a method for achieving configuration information in a network element of an xDSL network which comprises network elements on certain hierarchical levels. Its disclosure of a hierarchical xDSL network is unlike Jensen and, for the reasons stated above, it is believed that there would not be motivation to combine Jensen with the AAPA. Therefore, claim 7 is also believed to be distinguished over Jensen in view of the AAPA.

Referring now to the rejection of claims 9 and 10 as being unpatentable in view of US patent 5,495,475 Galaand et al. (hereinafter Galaand) in view of the admitted prior art AAPA, it is respectfully submitted that claims 9 and 10 are not suggested by this combination of art. Claim 9 is specifically directed to a method of effecting changes in configuration information in an xDSL network and the method comprises the steps of receiving a command for changing a piece of configuration information that pertains to a second network element that is located on a certain second hierarchical level, which second hierarchical level is below the first hierarchical level in an xDSL network, and storing that piece of configuration information at a configuration memory of the first network element in a form that results from executing the received

command. It also requires that the first network element is other than the network managing station and is located on the first hierarchical level.

The Examiner states that Galaand discloses "a method for effecting changes into configuration information in an xDSL network...". However, an examination of Galaand shows that it is directed to an automatic decomposition of a packet switching network and specifically shows in Figure 2 a typical model of a communications system in which user groups using work stations or personal computers are attached to LANs, application servers, PBXs (private branch exchange) or video servers. There is no indication of an xDSL network in Galaand. Galaand is also specifically directed to the method for automatic decomposition of a network topology into a backbone and subareas nodes so as to speed the routing path search without degrading the optimization criterion of the routing algorithm and without generating additional control messages on the network. Although Galaand does discuss at column 15, lines 7-12, updating topology information in a Topology Database, there is no indication in Galaand that a first network element which is other than the network managing station and is located on a first hierarchical level and receives a command for changing that piece of configuration information that pertains to a second network element that is located on a second hierarchical level, which second hierarchical level is below the first hierarchical level in an xDSL network. Thus, although topology information is disclosed at column 15, lines 7-12 and is therefore stored in the Topology Database, such storing of information in the Topology Database is not the same as the steps recited above with regard to claim 9. Again, although the AAPA discloses a hierarchical network, it is not seen where such a network would motivate one to use the Topology Database as disclosed in Galaand for purposes of determining the use of a first network element that is other than the network managing station and which is located on a first hierarchical level and for storing configuration information at a configuration memory of such a first network element in the form that results from executing a received command for changing a piece of configuration information that pertains to a second network element that is on a certain second hierarchical level. For the reasons set forth above, it is not believed that there would be motivation to combine Galaand with the AAPA and, even if combined, it is not seen how the limitations of claim 9 would be met.

Similarly, claim 10 is believed to be distinguished over Galaand in view of the AAPA since it depends from claim 9 and adds further limitations thereto.

Claim 12 is believed to be distinguished over Galaand in view of the AAPA since it is directed to a network element of an xDSL network where the network element is other than the network managing station and which is arranged to communicate with other xDSL network elements that are located on lower hierarchical levels in the xDSL network, and wherein the network element is arranged to store configuration information pertaining to at least one xDSL network element that is located on a lower hierarchical level in the xDSL network. The Topology Database disclosed in Galaand does not suggest a use in an xDSL network nor of the use of a network element which is arranged to store configuration information pertaining to at least one xDSL network element that is located on a lower hierarchical level in the xDSL network. The AAPA does not make up for this deficiency and, as such, it is respectfully submitted that claim 12 is distinguished over Galaand in view of the AAPA.

It is respectfully submitted that claim 13 is not suggested by the AAPA further in view of Galaand. Although the AAPA discloses an xDSL network comprising network elements of different hierarchical levels, the network management station in the AAPA is the sole element for purposes of containing network configuration information. The Examiner states that Galaand teaches that a number of other network elements in the network managing station are arranged to store configuration information pertaining to network elements that are located at lower hierarchical levels in the xDSL network than the network element at which the configuration information is stored. The Examiner cites column 15, lines 7-12 of Galaand to support this statement. However, as noted earlier, the cited portion in Galaand merely discusses a Topology Database located at every node of the network. The fact that the topology database is stored in nodes of the network does not teach that the topology information in any particular node contains configuration information pertaining to network elements that are located at lower hierarchical levels. As a result, even if one can argue that the network in Galaand can be combined with the AAPA, it would not teach the xDSL network claimed in claim 13 which not only has hierarchical levels and a network managing station, but a number of other network elements other than the network managing station which store configuration information pertaining to network elements that are located at lower hierarchical levels in the xDSL network

than the network element at which the configuration information is stored. As such, it is respectfully submitted that claim 13 is neither disclosed nor suggested by AAPA further in view of Galaand.

The prior art made of record and not relied upon is also not believed to disclose or suggest the claimed invention taken alone or in combination with the other cited art. Thus, US patent 5,910,970, Lu, discloses a modem that operates selectively in the voice-band frequency band and higher frequency bands. Although the modem uses a Digital Signal Processor so that different ADSL line codes can be implemented, there is no teaching in this reference of a method for distributing configuration information in an xDSL network as disclosed and claimed in the present information. The referenced ACKs, NACKs and Rejection Signals noted by the Examiner are with respect to the modem and in no way disclose or suggest the present invention.

US patent 6,678,721, Bell, discloses a system and method for establishing a point-to-multipoint DSL network. Here the point-to-multipoint communication network is established in the environment of a home or small office and the invention is realized through a computer that can dynamically establish both LAN and WAN communications. It is noted that the computer in this network environment is configured to assume a role as either a Master or a Slave on a LAN. Such a configuration does not in any way disclose or suggest the present invention as claimed including a method for distributing configuration information in an xDSL network as set forth in amended claim 1.

Finally, US patent 6,665,305, Weismann, discloses a system and method for detecting subscriber loops which, although it identifies circuit paths in a subscriber loop network, does not in any way disclose or suggest a method or system for distributing configuration information in an xDSL network as disclosed and claimed in the present application.

In view of the foregoing, it is respectfully submitted that the present application as amended is in condition for allowance and such action is earnestly solicited.

Respectfully submitted,

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